

Existing street conditions on Rose Avenue showing only minor needs for maitenance of curbs, sidewalks, and asphalt

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# 2.3.4 General Street and Subsurface Utility Improvements

#### **Existing Conditions:**

The existing infrastructure in this study area is in moderate to poor condition. Most roads show signs of excessive deterioration. Curbing and sidewalks are broken or vertically lifted in excess of standard tolerances, The storm sewer network is largely a patchwork of undersized culverts and overgrown drainage basins. In addition, City utility crews have suggested that the sanitary sewer collection system is undersized and is constructed of functionally obsolete clay pipe.

The only street in the entire study area that has been resurfaced recently is Chicora Avenue. Unfortunately, much of the drainage for that street remains in open ditches that are compromised by frequent driveway crossings and tree root overgrowth.

Wastewater treatment is provided by Western Carolina at their Mauldin Road plant. Outfall capacity is unknown for this area and should be further investigated for collection and treament capacity.



Existing street conditions on Briar Street showing extensive deterioration

# **Proposed Improvements:** STREETS

- A comprehensive inventory of the pavement conditions for the area should be conducted immediately and prioritized using a standard engineering evaluation.
- Systematic resurfacing in this area should be accompanied by complete streetscape restoration and/or improvement.
- At a minimum, public improvements should include the complete reconstruction of the rightof-way to include standard pavement width and depth, curbs, landscaping, and sidewalks. Specifically, improvements to the following streets should be made as part of any public or non-profit investment in new housing:
  - ₩ Chicora Avenue 1,100 linear feet
  - ₩ Dixon Street 550 linear feet
  - # Unnamed Street (Dixon to Chicora) 200 linear feet
  - ₩ Urban Street 475 linear feet
  - Springer Street 1,125 linear feet

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Total Basic Street Needs - 3,450 linear feet



Existing street conditions on Haynie Street showing existing cross section with curb, minimal planting strip, overhead utilities, and sidewalks

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- The following street connections or realignments should be considered:
  - ₩ Haynie Street realignment 500 linear feet
  - ₩ Quincy Street extension 400 linear feet
  - \*\* New E-W connection (Augusta to Urban) 1,000 linear feet

Total New Streets: 1,900 linear feet

 All other street improvements in the neighborhood are expected to be completed by private development as it occurs along its frontage.

#### TRAFFIC CALMING

 Physical traffic calming measures should be employed only after streets have been improved to include appropriate sidewalks, curbs, street trees, and pavement conditions.

Speed humps are popular because of their low cost of installation, but other techniques include marked on-street parking, mid-block lane narrowing (with supplement street tree planting), traffic circles, and street narrowing. When determining the appropriate technique, care should be expressed in maintaining an open and accessible street network.



Existing street conditions on Chicora Drive showing no curbs, sidewalks, and poor drainage conditions

#### **WATER & SEWER**

- A pipe conditions inventory for the sanitary sewer network in the neighborhood should be conducted using televideo equipment and added as a GIS layer. This layer can then be integrated with the pavement condition survey to identify target areas where subsurface work can be coordinated to avoid the "trenching after the street was resurfaced" pattern.
- Hydrants in the area should continue to be flow tested on a regular basis to ensure adequate pressure for fire protection. Those hydrants that are found to provide unacceptably low water pressure should be repaired immediately.



Existing Conditions at Springer Street Tunnel

# 2.0 **2.3.5 Springer Street Tunnel** The Master Plan **Existing Conditions:**

The only below-grade crossing of Church Street occurs at Springer Street. This tunnel is designed as a two way automobile passage with a full-height concrete wall separating the two lanes. The net effect of this design is the perception of two long, dark tunnels that are unsafe and hazardous to pedestrians whom we assume are the predominant users of the facility.

There is little lighting at either entrance and none exists within the tunnel itself, either through omission or vandalism.



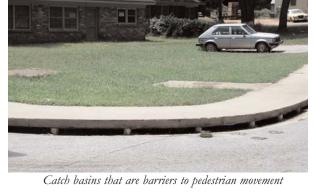
Rendering of proposed Springer Street Tunnel Improvements

#### **Proposed Improvements:**

The key to the tunnel's improvement involves a number of strategic design elements that are intended to minimize cost and maximize usage.

- Improve pedestrian and bicycle access through the tunnel by converting it to one-way (yield) traffic and dedicate the other for exclusive pedestrian and bicycle use. With so little automobile traffic through the tunnel and good visibility, such a change should have little impact on safety.
- Install and maintain new lighting to improve safety around the opening and inside the tunnel.
   Open a light well from the median in Church Street to permit natural light to enter the tunnel.
- Widen and improve the stairway up to Church Street to encourage more use and create a more monumental entry. Install a similar stairwell access on the other side of the tunnel to permit pedestrian access to the west side of Church Street.







Overgrown stream corridor

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# 2.3.6 Stream and Stormwater Improvements

#### **Existing Conditions:**

The early history of this area is derived largely from its connection to the natural environment, specifically the preponderance of springs located throughout the entire neighborhood. It is suspected that the largest of these springs, known as the Crescent Spring, was located underneath the current alignment of Church Street in the proximity of the Ramada Inn.

The few stream corridors that exist in this area have been dramatically altered by past development encroachments and overgrowth by kudzu. In addition, the water quality has been degraded by excessive trash and debris found along its banks and in its channel. An existing creek has been piped in the proximity of Biltmore Drive and through the site of Sirrine Stadium. This creek is daylighted on the north side of University Ridge. These creeks are part of the watershed that directly feeds the Reedy River just north of the study area.

The City of Greenville maintains a stormwater program that is designed for efficient conveyance of stormwater from public rights-of-way. This program



Trash and exposed sewer line across stream



More trash in the stream bed

is generally restricted to water quantity issues and does not address water quality.

Additionally, the stormwater structures, specifically, the catch basin inlets are barriers to pedestrian usage with some inviolation of the Americans with Diabilities Act because they preclude the installation of a curb ramp.

#### **Proposed Improvements:**

- Institute a formal creek maintenance program to improve the overall condition of the streams in the neighborhood. Such a program will likely be part of the City's required implementation of Phase II of the Federal Clear Water Act NPDES Permit so its commencement for this area is appropriate.
- Commit to a public policy of daylighting streams whenever practical. Such a practice would improve the overall water quality for the area and will increase the capacity of the stream corridor through greater groundwater infiltration.
- Use open channel design as a sustainable, environmentally-friendly alternative for existing unmanaged streams
- Investigate the stream that is encased in a pipe along Biltmore Drive for potential daylighting.

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- Unfortunately, it is highly impractical to unearth this stream as it travels through the stadium, yet it remains a laudable goal. The re-creation of this natural corridor would serve as a centerpiece to a greenway park along Biltmore Drive.
- Clear the other primary creek present in this area, Springer Creek of the kudzu and overgrowth and repaire to a more natural condition. The restoration of this creek will not only improve its water quality, but it also will open up the area for improved saftey and general cleanliness. The probable springhead for this area, located near the bend in Springer Street, could serve as a Community Garden or other recreation area.

#### 2.3.7 Aerial Utilities

# **Existing Conditions:**

There are currently three predominant utility companies that provide service above ground. Duke Power has main transmission lines on Augusta Street, Jones Avenue, Church Street, University Ridge, and Thruston Street. BellSouth routes their primary fiber cable on Augusta Road. Charter Communications, the local cable television provider, has a hybrid fiber/coaxial system in the area, most of which is located on the existing poles, though some underground service is available.

# **Proposed Improvements:**

To bury these utilities, while preferred for its aesthetic impact, is frequently financially impractical.

Therefore, the following are proposed:

- Given financial constraints, establish a priority for the placement of utilities in a duct bank within the Haynie-Pearl Neighborhood Center, where the investment of development warrants a higher streetscape treatment.
- Replace existing utility poles that are crooked, warped, or otherwise substandard.
- Consolidate poles to one side of the street only and, if practical, placed along the rear of property lines or in rear lanes.
- Underground utility services to all new development.

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### 2.3.8 Street Lighting

### **Existing Conditions:**

While provided as a base service by the City of Greenville, the City maintains no formal policy for the provision of street lighting. The general rule is to place cobra-head lighting at most intersections and in darker areas where safety and security warrant their placement.

Many dark places and poorly lit streets exist in the neighborhood. This lack of proper lights adds to both the perception of unsafe areas as well as the reality of increased crime occurring in the shadows.

### **Proposed Improvements:**

- Establish a clear and coherent street lighting policy to guide future lighting decisions in Haynie-Sirrine. Use more frequent light fixture spacing. Use decorative, pedestrian-scaled lightingwhen financially feasible. If standard cobra-head lighting are used, place the fixtures such that they light both the street and the sidewalk. Spacing for fixtures should be a minimum of 250-300 feet oncenter with at least three fixtures within a typical 400-foot block (one at each end and one illuminating the mid-block).
- Use more frequent spacing of lower-wattage bulbs as it provides an improved overall illumination level and leads to fewer shadows and dark areas. Fixture heads should be full-cutoff with 100% of the light cast from the bulb directed downwards. Bulbs emitting white light such as Metal Halide fixtures are preferred to yellow or blue hued lights as they provide for a truer light for the pedestrian.
- When selecting fixtures and locations, accommodate eventual growth of street trees so as not to encourage future insensitive tree pruning and to reduce the potential for shadows through the limb and leaf structures.

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#### 2.3.9 Transit Improvements:

### **Existing Conditions:**

Transit service is currently only provided on the western edge of this neighborhood. The closest bus route by Greenville Transit Authority (GTA) servicing this neighborhood is along the Augusta Street corridor. County Square is highlighted as a key destination on the GTA System Map, though there is no service provided to the building.

### **Proposed Improvements:**

- Expand a system route into the middle of the neighborhoodspurring from this existing route and running along the Haynie-Pearl corridor. A number of alternatives are possible:
  - \* Augusta-Haynie-Church (N)-University Ridge-Augusta
  - # Augusta-Haynie-Pearl-Cleveland
  - \*\* Augusta-Haynie-Pearl-Church (S) to Augusta/Mills
- Explore other routing permutations to provide the transit-dependent population an opportunity to have transit stops located within close proximity to their homes.
- Consider a transit shuttle or similarly-scaled circulator during event times along University Ridge to access the parking lots at Greenville High School, County Square, and the other County office buildings located on the south side of the street. Similar to vintage trolleys operating in other cities, these buses could be branded to the University Ridge corridor or tie into a potential Reedy River Greenway-West End-Downtown circulator running up Augusta Street and Main Street. With high frequency during lunch times and evening hours, such a service could be very similar to the 28th Street Mall in downtown Denver, further encouraging off-site park-and-ride lots such as at County Square to relieve the need for additional parking structures in the downtown area.